UNIVERSITY OF QUEENSLAND

Prentice Computer Centre

NEWSLETTER

authorization: Director of the Centre

1   REMOTE BATCH STATIONS

On Monday 8 March, the first two of the Centre's remote stations
will come into operation.   These are the stations located at
Griffith University and in the Commerce Building at the University
of Queensland.   Each station comprises a PDP-11/10 mini-computer
with card reader, line printer and console terminal.

In this first release, these stations will provide a batch processing
service similar to that available at the Centre, but subject to the
restrictions listed below.   Additionally, by use of the 'LOCATE'
command /switch, a terminal user can request that his listings be
printed at a remote station rather than at the Centre.

The remote stations will operate from 9 a.m. to 5 p.m. daily
(Monday to Friday) but will close over lunch.   Any Centre user
can process work via any remote station.

In this first release, a number of minor restrictions apply to batch
jobs submitted at a remote station.

(1)   The only Optical Mark Card job which can be processed at a
      remote station isMIDITRAN.   All other optical mark card jobs
      must be submitted for processing at the Centre.

(2)   The PPN on the $JOB card must be enclosed in square brackets.

(3)   Switches allowed on the $JOB card are:

   /AFTER:HH:MM   The argument given must be in this form - the
                       time is absolute during the current day.
                       If this switch is not present the default is
                       the current time.

   /CARDS:NN   Default is 0.

   /CORE:NNK   Default is 25K.

   /COST:$NN.NN   The dollar sign and decimal point are optional.

                       If both are omitted cents are assumed.
                       Default is $1.00.

/DEADLINE:HH:MM   Argument as for /AFTER above.
Default if no deadline.

/DEPEND:NN   Default is $\emptyset$. (For more details refer to
Section 3.2.4 Interjob Dependency of the
Operating System Command Manual)

/LOCATE:00   If omitted defaults to the station from which
the job was submitted. This switch causes any
spooled LPT output and the log file to be
printed at the station specified.
The stations are:

COMPUTER ROOM (1000 LPM Printer)   Station 0
HAWKEN BUILDING   Batch Station 2
  (Room G10A - not yet installed)
COMMERCE BUILDING   Batch Station 3
  (Room 218)
MEDICAL SCHOOL, HERSTON ROAD   Batch Station 4
  (Room 78, Dept. of Social & Preventive Med)
  (not yet installed)
GRIFFITH UNIVERSITY   Batch Station 5
  (Room 1.39, Humanities Building)

/NAME:AAA...   Authorized user's name.

/NORESTART   The job is not restartable (/RESTART is the default)

/PAGES:NN   Default is 100.

/PRIORITY:NN   Default is 10.

/RESTART   Job is restartable. (This is the default)

/TIME:HH:MM:SS   Limit on CPU time used by job. Default is 5 minutes.

/TPLOT:MM   Limit on plotter time in minutes. Default is $\emptyset$

/UNIQUE:N   Default is 1. (See Operating System Command Manual
page 3-32 for explanation of this switch)

(4)   The following SPRINT-10 control cards are not implemented:

    $DUMP
    $ERROR, $NOERROR
    $MODE
    $PASSWORD
    $RELOCATABLE

However, monitor and batch commands, e.g. .IF(ERROR)STATEMENT
may be present in a deck and are copied directly into the
control file in the normal manner.

(5) Switches allowed on the $LANGUAGE cards are:

/CREF
/NOLIST
/MIDITRAN   Note: This switch causes conversion of Miditran
                 cards to ASCII to be performed on the PDP-11.
                 This pre-processing continued until an
                 end-of-image card (Miditran card marked in
                 all positions of the first and last columns
                 of the card, i.e. the first column of the
                 statement number field and the last column
                 of the statement field) is encountered.

(6) No processor switches are allowed on $ cards for language
     processors; however, they may be used in monitor commands in the
     normal manner and these can be entered into the control file as
     in (1) above. For a discussion of processor switches see
     Section 1.5.7 of the Operating System Command Manual.

(7) Switches allowed on the $DECK and $DATA cards are:

/MIDITRAN   (see note above)

(8) No switches are allowed on $EXECUTE or $INCLUDE cards.

(9) $ commands may not be abbreviated, for example, the command
     $EXECUTE may not be shortened to $EXE.

(10) Continuation cards are not implemented.

(11) Only ASCII card code is allowed on punched cards.
     Most of the characters on IBM 029 card punches are the same as
     in ASCII card code; however, there are some differences.
     These are:

ASCII Character	Character on IBM 029 Card Punch
[	Shift R
]	Shift B
\	Shift T
↑	Shift G
!	Shift Y

(12) The only end-of-job card recognized is $EOJ.

Users should note that, at present, only a slow (1200 bps) line connects
the remote stations to the PDP-10.   To assist with error recovery
requiring the re-reading of a card deck, large decks should, wherever
possible, be split into several smaller ones. The MIDITRAN facility
at the remote batch stations is still undergoing tests and is not
likely to be available prior to 15 March.

2   NEW VERSION OF SPSS

From 1 March the latest version 6.01.1 of the Statistical Package
for the Social Sciences (SPSS) will be available to all users.
With its unification of documentation into one manual and the
addition of a few new procedures, it should prove both more
convenient and useful to users.   Until further notice, it will
be locared on NEW: and can be invoked in a similar fashion to the
existing version:

            .RU NEW:SPSS

            *LPT := MYFILE.SPS/switches

Since the format of some of the SPSS control cards differs from that
of the existing version, intending users should consult the new manual,
particularly appendix B which details these changes. The manual, which
can be inspected at the Centre or alternatively purchased for $12 is:

        Nie, Hull, Jenkins, Steinbrunner, Bent
        Statistical Package for the Social Sciences
        Second Edition
        McGraw Hill Book Company (1975)

Some of the features detailed in the manual, notably archiving and
file merging have not been implemented in this version of SPSS.
Details of these and other deviations from the manual can be found
on the file SPSS.DOC which is also on NEW:.

This version of SPSS requires approximately 30.5K of core memory plus
whatever core is allocated for work space for the procedures. Unless
a /SPACE: switch to the contrary is used, SPSS assumes a default
allocation of 2K for work space.   As a consequence, the package
requires slightly more than 32K, unless this default is overridden.
Thus, if it is desired to use the package during the day, when the
maximum core allocation available to users is 32K, a /SPACE:3P switch
must be used.   This will reduce the work space to 1.5K, but will
enable the job to run in 32K.   This requirement does not hold after
6 p.m., though users may, according to their requirements, specify
this switch with an argument of up to 33K.

The amount of work space required can be determined from the formulas
given in the manual.   This will give the answer in bytes which is
then divided by four to obtain the requirement in words.

Naturally, if any difficulties are encountered in the use of this new
version, it would be appreciated if they were reported to the Centre.

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3   INTERACTIVE STATISTICS TEACHING PROGRAMS

TUSTAT II, a set of programs written in BASIC and suitable for the
interactive teacher of statistics from a terminal, is now available.

Approximately 80 programs are available which comprehensively cover
such topics as t-tests, analysis of variance and covariance,
correlation, multiple regression, distribution sampling, multivariate
techniques and non-parametric statistics.

The programs are designed so as to require a minimum of knowledge
about computers and be simple to use. Most operate interrogatively,
asking questions of the user on the specification of the problem
and its data. Many of the programs have an alternative method of
data input, which minimizes the effort where larger quantities of
data are involved.

Dr. Brian Carss (Education Dept.) has been kind enough to test this
package and would be pleased to advise academic departments on its
use in teaching situations.

Documentation and sample output and usage of all programs is
contained in the manual which may be inspected at the Computer
Centre -
> YOUNG O KOH
> TUSTAT II
> TUTORIAL SYSTEM FOR STATISTICS WITH TIMESHARING COMPUTERS
> SECOND EDITION 1973

3.1 All programs reside on the statistics area STA: under a six
character name. Many of the program names given in the manual
(e.g. TRIWAYF), being of more than six characters in length, have
been abbreviated (e.g. to TRIWAF). A correspondence table of the
program names, along with other information on running the programs
in this system, can be found on the HELP file for TUSTAT.

3.2 Running TUSTAT

Most programs can be run simply by typing (after logging in):

.R BASIC   <cr>

The computer responds with - Ready, for help type HELP

OLD STA:??????   <cr>

Response is - Ready

.RUN   <cr>

where   ?????? is the name of the desired program.
          and <cr> signifies a carriage return.

3.3 For programs that operate in so called 'file management'
mode, the most usual method of presenting the data is to create
a data file consisting of DATA statements which are line numbered
sequentially from 04000 upwards. This data is then appended to
the program prior to running by use of the command WEAVE.

e.g.   suppose a suitable file DATA.DAT has been created previously,
        then the sequence of commands is -

                .R BASIC   <cr>
                Ready
                OLD STA:??????   <cr>
                Ready
                WEAVE DATA.DAT   <cr>
                Ready
                RUN   <cr>

3.4 The cross tabulation program CROSTA can be run using the
procedure of 3.2, however its data must be contained on a previously
created file DATA1.BAS.   The format of this file is simply the
numbers separated by commas, without line numbers etc.

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